

Atty. Dkt. No. 200207627-1

REMARKS

This reply is in response to the Office Action mailed on February 28, 2006 in which Claims 1-14 and 19-24 were rejected. With this response, claims 9 and 19 are canceled; claims 1-2, 7-8, 14 and 22-23 are amended and claims 25-28 are added. Claims 1-8, 10-14, and 20-28 are presented for reconsideration and allowance.

I. Examiner Interview Summary.

On May 24, 2006, a telephonic interview was held between Examiner Adams and Applicants' attorney, Todd A. Rathe. The rejection of claim 1 was discussed. Although no agreement was reached, Applicants wish to thank Examiner Adams for the opportunity to discuss the rejections and for Examiner Adam's suggestions for amending the claims and adding claims.

II. Rejection of Claims 1, 4-6, 8-13 and 19-24 under 35 USC § 102(b) based upon Okuzawa or Komori.

Paragraph of 1 of the Office Action rejected claims 1, 4-6, 8-13 and 19-24 Under 35 USC § 102(b) as being anticipated by Okuzawa (U.S. Patent No. 4,888,617). Paragraph 2 of the Office Action rejected claims 1, 4-6, 8-13 and 19-24 Under 35 USC § 102(b) as being anticipated by Komori (US Patent 3,919,972). Claims 9 and 19 are canceled. Claims 1, 4-6, 8, 10-13 and a 20-24, as amended, overcome both of the rejections based upon Okuzawa and Komori, individually.

A. Claim 1

Claim 1, as amended, precise in object catch bin which include a backstop and a tray. The tray is angularly disposed to the backstop and pivots about the vertex of the tray and the backstop. The tray has a top surface, wherein the object catch bin is configured such that an entirety of the top services not engaged by any other overlying structure prior to receiving an object.

Neither Okuzawa nor Komori disclose an object catch bin having a top surface, wherein the object catch bin is configured such that an entirety of the top surface is not engaged by any other overlying structure prior to receiving an object. In contrast, Okuzawa

Atty. Dkt. No. 200207627-1

illustrates a feed roller 98 which engages the top surface of plate 62. Likewise, Komori discloses a feed roller 10 which engages the top surface of plate 5 when no objects are upon plate 5. Accordingly, claim and 1, as amended come overcomes a rejection based upon Okuzawa and Komori individually. Claims 2-7 and 20 depend from claim 1 and overcome the rejection for the same reasons.

B. Claims 2 and 8

Claim 2 depend from claim one and, as amended, recites that the tray is pivotable relative to the backstop between a first position in which object engaging surfaces of the tray and of the backstop are at a first angle and a second position in which the object engaging surfaces of the tray and the backstop are at a wider and obtuse second angle.

Claim 8, as amended, recites an object catch bin having a tray and a backstop, wherein the tray is pivotable relative to the backstop between the first position in which object engaging surfaces of the tray end of the backstop are at a first angle and a second position in which the object engaging surfaces of the tray and the backstop or any wider and obtuse second angle. The wider obtuse angle facilitates reception of additional objects when the object catch bin is at least partially filled.

Neither Okuzawa nor Komori disclose them a tray that pivots relative to a backstop between a first position in which object engaging surfaces of the tray and the backstop are at a first angle and a second position in which the object engaging surfaces of the tray and the backstop are at a wider and obtuse second angle. In contrast, the largest any wall in extend relative to plate 62 or plate 5 of Okuzawa and Komori, respectively, is 90°. As a result, claims 2 and 8 overcome the rejection based upon Okuzawa or based upon Komori. Claims 10-13, and 21 depend from claim 8 and overcome the rejection for the same reasons.

C. Claim 22

Claim 22, as amended, recites an apparatus which includes a tray and a backstop coupled to the tray end configured to pivot with the tray. The tray and of the backstop have

Atty. Dkt. No. 200207627-1

surfaces angularly spaced from one another by an obtuse angle and configured to engage caught objects. This obtuse angle facilitates reception of objects being caught.

Neither Okuzawa nor Komori disclose them a tray and a backstop which pivot with one another and which have surfaces configured to engage caught objects that are angularly spaced from one another by an obtuse angle. Accordingly, claim 22, as amended, overcomes the rejection based upon Okuzawa and the rejection based on Komori. Claims 23-24 depend from claim 22 and overcome the rejection for the same reasons.

III. Rejection of Claims 1, 2-6, 8-13 and 19-24 under 35 USC § 102(b) Based upon Okada.

Paragraph 3 of the Office Action rejected Claims 1, 2-6, 8-13 and 19-24 under 35 USC § 102(b) as being anticipated by Okada, U.S. Patent No. 5,183,248. Claims 9 and 19 are canceled. Claims 1-2, 4-6, 8, 10-13 and 20-24, as amended, overcome the rejection based upon Okada.

A. Claim 1

Claim 1, as amended, recites an object catch bin which include a backstop and a tray. The tray is angularly disposed to the backstop and pivots about the vertex of the tray and the backstop. The tray has a top surface, wherein the object catch bin is configured such that an entirety of the top services not engaged by any other overlying structure prior to receiving an object.

Okada fails to disclose an object catch bin having a top surface, wherein the object catch bin is configured such that an entirety of the top surface is not engaged by any other overlying structure prior to receiving an object. In contrast, Okada requires that a feed roller 11 engage the top surface of plate 13. Accordingly, claim 1, as amended, overcomes the rejection based upon Okada. Claims 2, 4-6 20 depend from claim 1 and overcome the rejection for the same reasons.

B. Claims 2 and 8

Atty. Dkt. No. 200207627-1

Claim 2 depends from claim 1 and, as amended, recites that the tray is pivotable relative to the backstop between a first position in which object engaging surfaces of the tray and of the backstop are at a first angle and a second position in which the object engaging surfaces of the tray and the backstop are at a wider and obtuse second angle.

Claim 8, as amended, recites an object catch bin having a tray and a backstop, wherein the tray is pivotable relative to the backstop between the first position in which object engaging surfaces of the tray end of the backstop are at a first angle and a second position in which the object engaging surfaces of the tray and the backstop or any wider and obtuse second angle. The wider obtuse angle facilitates reception of additional objects when the object catch bin is at least partially filled.

Okada fails to disclose a tray that pivots relative to a backstop between a first position in which object engaging surfaces of the tray and the backstop are at a first angle and a second position in which the object engaging surfaces of the tray and the backstop are at a wider and obtuse second angle. As a result, claims 2 and 8 overcome the rejection based upon Okada. Claims 10-13 and 21 depend from claim 8 and overcome the rejection for the same reasons.

C. Claim 22

Claim 22, as amended, recites an apparatus which includes a tray and a backstop coupled to the tray end configured to pivot with the tray. The tray and of the backstop have surfaces angularly spaced from one another by an obtuse angle and configured to engage caught objects. This obtuse angle facilitates reception of objects being caught.

Okada fails to disclose a tray and a backstop which pivot with one another and which have surfaces configured to engage caught objects that are angularly spaced from one another by an obtuse angle. In contrast, plate 13 and the illustrated back wall are at a 90° angle. Accordingly, claim 22, as amended, overcomes the rejection based upon Okada. Claims 23-24 depend from claim 22 and overcome the rejection for the same reasons.

IV. Rejection of Claim 3 under 35 USC § 103(a) Based upon Okuzawa, Komori or Okada in Combination with Kim.

Atty. Dkt. No. 200207627-1

Paragraphs 4-6 of the Office Action rejected Claim 3 under 35 USC § 103(a) as being unpatentable over either one of Okuzawa, Komori or Okada, in view of Kim (U.S. Patent Publication No. 2002/0084576). Claim 3 depends from Claim 1. Because Kim fails to satisfy the deficiencies of Okuzawa, Komori and Okada with respect to Claim 1, Claim 3 overcomes the rejection based upon Okuzawa, Komori or Okada in view of Kim for the same reasons discussed above with respect Claim 1.

V. Rejection of Claim 7 and 14 under 35 USC § 103(a) Based upon Okuzawa, Komori or Okada in Combination with Sellers.

Paragraphs 7-9 of the Office Action rejected Claims 7 and 14 under 35 USC § 103(a) as being unpatentable over either one of Okuzawa, Komori or Okada, in view of Sellers (U.S. Patent No. 5,085,421). Claims 7 and 14, as amended, each recite conveyor device configured to project and drop objects onto the tray, wherein the conveyor device is configured to disengage the object once the objects are on the tray..

Neither Okuzawa, Komori, Okada or Sellers, alone or in combination, disclose or suggest a tray, bias means for resisting pivoting of the tray y and a conveyor device configured to project an drop objects onto the tray, wherein the conveyor device is configured to disengage the objects once the objects are on the tray. The Office Action acknowledges that neither Okuzawa, Komori or Okada disclose conveyor means for projecting an object into the tray. As a result, the Office Action attempts to additionally rely upon Sellers. However, Sellers does not disclose a conveyor the recite a conveyor device.. The Office Action refers to FIGURES 2, 3A and 3B of Sellers for disclosing such conveyor means. However, belt 110 and pusher plate 120 are not configured to project and drop an object into tray structure 42. Belton 110 and pusher plate 120 do not disengage object once the objects are on the tray. In contrast, belt 110 and pusher plate 120 merely push objects along tray structure 42. Accordingly, Claims 7 and 14, as amended, overcome the rejection based upon Okuzawa, Komori or Okada in view of Sellers.

VI. Added Claims.

With this Response, Claims 25-28 are added. Consideration and allowance of Claims 25-28 are respectfully requested.

Atty. Dkt. No. 200207627-1

A. Claim 25

Claim 25 depends from claim 1 and further recites that the tray has a top surface adding a first length that extends from the backstop across and beyond the bias means and where the top service is uncovered such that the tray may catch objects having a second length greater than or equal to the first length and that fall against the backstop while also falling across and beyond the bias means.

The prior art of record fails to disclose a tray having a top surface having a first uncovered length such at the tray may catch object having a second length greater than or equal to the first length and that fall against the backstop while also falling across and beyond the bias means. In contrast, each of Okuzawa, Komori and Okada disclose trays that have a feed roller extending over and above and in engagement with the tray. Accordingly, added claim 25 is presented for consideration and allowance.

Atty. Dkt. No. 200207627-1

B. Claims 26-28.

Claim 26 recites a method which comprises dropping an object onto a tray such at the object engages a backstop and falls across and over a bias beneath the tray resiliently supporting the tray. Claim 26 further recites paving the tray against the bias in response to impact of the object with the tray.

The prior art of record fails to disclose such a method. In particular, the prior art of record fails to disclose any device capable of receiving an object such at the object may engage a backstop while also falling across and over a bias beneath the tray. Thus, claim 26 is presented for consideration and allowance.

Claim 27 depends from claim 26 and further recites that the tray pivots it's fleeing a first position in which object engaging surfaces of the tray and of the backstop extend at a first angle to a second position in which the object engaging surfaces of the tray and the backstop extend at a wider and obtuse angle upon catching the object. Claim 28 depends from claim 26 and recites that the tray and the backstop have surfaces configured to engage the object and extending at an obtuse angle relative to one another.

The prior art of record fails to disclose surfaces configured to engage a caught object which extend at an obtuse angle relative to one another. In contrast, the largest angle at which such surfaces may extend relative to one another in the prior art appears to be 90°. Accordingly, added claims 27 and 28 are presented for consideration and allowance.

VII. Conclusion.

After amending the claims as set forth above, Claims 1-8, 10-14, and 20-28 are now pending in this application.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Atty. Dkt. No. 200207627-1

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 08-2025. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 08-2025. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 08-2025.

Respectfully submitted,

Date May 30, 2006

By Todd A. Rathe

RATHE PATENT & IP LAW
Customer Number: 22879
Telephone: (262) 478-9353
Facsimile: (262) 238-1469

Todd A. Rathe
Attorney for Applicant
Registration No. 38,276